



December 8, 2006

DESIGN MEMORANDUM No. 06-15
TECHNICAL ADVISORY

TO: All Design, Operations, District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich
Anthony L. Uremovich
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Production Management Division

SUBJECT: Prestressed-Concrete Box Beam Details

REVISES: *Indiana Design Manual* Figures 63-15A through 63-15R

EFFECTIVE: June 13, 2007, Letting

Each subject figure has been revised to show a change in the mild-reinforcement configuration and a decrease in the size of the voids for the prestressed-concrete box beam detailed. Such members should be designed in accordance with these suggested details. Plan details should reflect these changes.

The most notable changes in the beam sections is eliminating the mark-1303 M-shaped stirrup, extending the mark-1301 hooked stirrup's legs such that the hooks are exposed above the beam, and eliminating a column of two prestressing strands. These changes affect the beam and steel dimensions as shown on the markups. The beam properties are also affected as shown.

The affected beam sizes include those for all depths of 915-mm (36-in.) width and 1220-mm (48-in.) width composite sections. The revised metric-units versions have been posted on the Department's website, at www.in.gov/dot/div/contracts/standards/dm/Part%206/Ch%2063/ch63.htm. The English-units versions, once available, will reflect these changes.

New figures are also included, 63-13F(1), which shows details for the placement of mild reinforcement at the end of a 914-mm (36-in.)-width skewed beam, and 63-13L(1), which shows such details for a 1220-mm (48-in.)-width skewed beam.

These changes do not affect non-composite box beams, which are those designated WS.

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